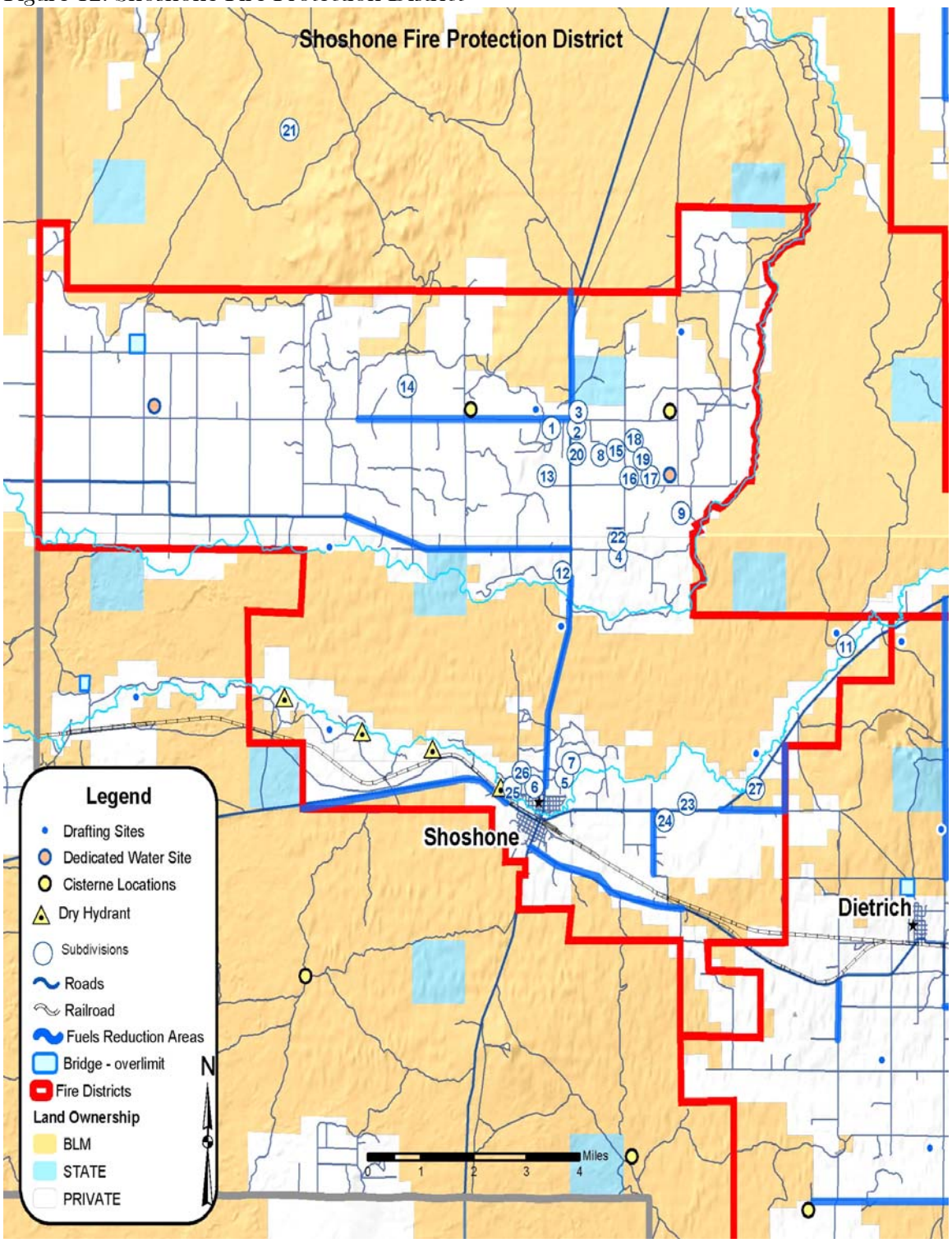
Figure 12. Shoshone Fire Protection District



6.3 Shoshone City and Rural Fire Protection District

The Shoshone FPD includes over 126 square miles of service area, which is moderately populated with private homes and ranches spread throughout the PD. (Figure 1)

Wildfire frequency in the Shoshone assessment area is high. The Shoshone City and Rural Fire Department responds to an average of forty-seven (47) brush fires within and near the city limits annually, and since 1975, have been involved with 126 wildfires for a total of 54,322 acres lost. Incident starts are from both natural and human causes. (Table 20)

Open bodies of water include Little Wood River, Big Wood River and the Milner-Gooding irrigation canal with numerous smaller canals, laterals and stock watering ponds.

Table 20. Shoshone Fire Protection District Fire Cause Determination

Year	Human	Natural	Structure	Vegetation	Vehicle	Other	Average Increase
2000	26	2	16	12	22	24	
2001	33	9	12	9	30	45	
2002	30	2	18	12	40	38	
2003	89	6	21	24	36	39	
Total	134	17	67	57	128	146	

H=Human/Man Caused
N=Natural/Lightning Caused
Other= power lines, standby, fuel spills, false alarms, investigations, hazmat etc.

6.3a Fire, Structural, and Community Assessment for Shoshone FPD

The following is a summary of the **Fire Hazard Assessment** and **Structural Hazard Assessment** for the Shoshone FPD. **Tables 21& 22** displays the complete results of each assessment process. Whereas, **Table 22** the **Structural Hazard Assessment** displays the overall **Risk Assessment Rating** for each subdivision.

Fire Hazard Assessment Attributes:

Vegetation Type – Sagebrush-grassland, annual grasses and forbs are the primary carrier of any ignition to the wildland-urban interface.
Slope – Most slopes within the assessment are 10-30%.
Aspect – The majority of the structures within the assessment area face north and east.
Elevation – The elevation within the assessment area averages between 4000-4200 feet.
Fuel Type – Fuel types within the assessment area are primarily sagebrush/grass and weeds.
Fuel Density – Fuel density within the assessment area is broken light -moderate fuels with a 20-30% canopy cover.
Fuel Bed Depth – Fuel bed depth with the assessment area light – moderate, averaging 1-3 feet.

Table 21. Fire Hazard Assessment for Shoshone FPD

Subdivision/Parcels	Vegetative Type	Rating Elements						
		Slope	Aspect	Elevation	Fuel Type	Fuel Density	Fuel Bad Depth	Total Rating
Six Mile	*SG Weeds	A	A	A	B	A	A	7
Stowell S	" "	A	A	A	B	A	A	7
Stowell N	" "	A	A	A	B	A	A	7
Vista Alegre	" "	A	A	A	B	A	A	7
Fruit Tract #1	" "	A	A	A	B	B	A	8
Fruit Tract #2	" "	A	A	A	B	B	A	8
Fruit Tract #3	" "	A	A	A	B	B	B	9
Parker	" "	A	A	A	B	A	A	7
Green Acres	Barren	-	-	-	-	-	-	-
Cowboy	SG Weeds	A	A	A	B	A	A	7
Crater Butte	" "	A	B	A	B	C	B	11
Edwards	" "	A	A	A	B	A	A	7
Hall	" "	A	A	A	B	A	B	8
Black Butte	" "	B	A	A	B	A	A	8
Sunny Slope	" "	A	A	A	A	B	A	7
Sky High Estates	" "	A	A	A	B	A	B	8
Sky High #2	" "	A	A	A	B	B	A	8
Sky High #3	" "	A	A	A	B	B	B	9
Sky High #4	Barren	-	-	-	-	-	-	-
Horseshoe Ranch	" "	A	A	A	B	B	A	8
Drum	Barren	-	-	-	-	-	-	-
Northview	SG Weeds	A	A	A	B	B	A	8
Harris	" "	A	A	A	B	B	A	9
Depew	" "	A	A	A	B	A	B	8
Riverview	" "	A	A	A	B	B	B	9
Sunset RV Park	" "	C	A	A	B	C	C	13
Urrutia Village	" "	A	A	A	B	A	A	7
Page 1 of 2 Assessment Rating								**207**

A(1)=Class A low fire hazard assessment rating
B(2)=Class B medium fire hazard assessment rating
C(3)-Class C high fire hazard assessment rating

Structural Assessment Attributes:

Structure Density – The structure density within the assessment area is at least one structure per 5 acres.
Proximity to fuels – The average distance to flammable fuels and adjacent to the wildland-urban interface of all the subdivisions in the assessment area is less than 40 feet.
Building Materials – Less than 12% of the structures within the assessment area have non fire resistant roofs and/or siding.
Survivable Space – 87% of the structures within the assessment area and adjacent to the wildland-urban interface have improved survivable space around the property.
Roads – Some roads within the assessment area are inadequate, narrow and/or single lane, minimally maintained, and contain no shoulders.
Response Time – Average response time to the majority of the subdivisions throughout the assessment area is 30 minutes or more.
Access – The average access throughout the assessment area is inadequate for suppression equipment. Many subdivisions have narrow roads, which are not maintained during winter months, and inferior turn around areas.

Table 22. Structural Hazard Assessment for Shoshone FPD

Subdivision Parcels	Rating Elements								
	Structure Density	Proximity Of Fuels	Building Materials	Survivable Space	Roads	Response Time	Access	Total Rating	Risk Rating
Six Mile	A	B	A	B	B	B	A	11	A-54%
Stowell S	A	A	A	A	B	B	B	10	A-69%
Stowell N	A	B	A	B	B	B	B	12	A-54%
Vista Alegre	A	B	A	A	B	B	B	11	A-62%
Fruit Tract #1	A	B	A	B	A	A	A	9	A-69%
Fruit Tract #2	A	B	A	B	A	A	A	9	A-69%
Fruit Tract #3	A	A	A	B	A	A	A	8	A-69%
Parker	A	B	A	A	B	B	B	11	A-62%
Green Acres	Barren	-	-	-	-	-	-	-	-
Cowboy	A	B	A	B	B	A	B	11	A-62%
Crater Butte	A	B	A	B	B	A	B	11	B-54%
Edwards	A	B	A	B	B	B	B	12	A-54%
Hall	A	B	A	B	B	B	B	12	B-54%
Black Butte	A	B	A	B	B	C	B	13	A-46% B-46%
Sunny Slope	A	B	A	B	B	B	A	11	A-62%
Sky High Estates	A	B	A	B	B	B	B	12	B-54%

Subdivision Parcels	Rating Elements								
	Structure Density	Proximity Of Fuels	Building Materials	Survivable Space	Roads	Response Time	Access	Total Rating	Risk Rating
Sky High #2	A	B	A	B	B	B	B	12	B-54%
Sky High #3	A	B	B	B	B	B	B	13	B-69%
Sky High #4	Barren	-	-	-	-	-	-	-	-
Horseshoe Ranch	A	A	A	B	B	B	B	11	A-54%
Drum	Barren	-	-	-	-	-	-	-	-
Northview	A	B	A	B	A	A	B	10	A-62%
Harris	A	A	A	B	B	A	B	10	A-62%
Depew	A	B	A	B	B	A	B	11	A-54%
Riverview	A	B	A	A	B	A	C	11	A-54%
Sunset RV Park	C	C	B	B	B	A	B	15	B-38% C-38%
Urrutia Village	A	B	A	B	A	A	A	9	A-77%
Page 2 of 2 Assessment Rating								**193**	

A(1)=Class A low fire hazard assessment rating
B(2)=Class B medium fire hazard assessment rating
C(3)=Class C high fire hazard assessment rating

Of the twenty seven (27) subdivisions in the Shoshone FPD, seventeen (17) received a Class A (low) risk assessment rating, six (6) subdivisions received a Class B (moderate) risk assessment rating, one received a Class C (high risk) rating, and three (3) subdivisions were undeveloped.

Issues and concerns common to most subdivisions include: Access and egress off main roads to individual home sites, Inadequate turn around space for emergency equipment, dedicated water for refill sites, fallow agriculture ground gone to weeds, homemade, unrecorded street signs.

Top ten (10) Lincoln County subdivisions representing the greatest risk:

1).Sunset RV Park, 2.) Skyhigh #3, 3.) Skyhigh Estates, 4.) Skyhigh 2, 5.) Fruit Tract #2, 6.) Hall, 7.) Edwards, 8.) Black Butte, 9.) Fruit Tract #1, 10.) Crater Butte.

Enforcement of standards and building codes upon permit approval has created a substantial amount of concern for safety during emergency fire suppression efforts. Some of the newer subdivisions have not adopted formal Codes, Covenants or Regulations, (CCR's) necessary to govern development.

To date Lincoln County has thirty-one (31) approved subdivisions in various stages of development, and several, additional applications forthcoming.

The following is a summary of the Community Assessment for the Shoshone FPD. Table 22 displays the assessment results. Overall the Shoshone FPD received a Class A (low-1) community assessment rating for three (3) out of twelve (12) elements for (25.0%); **a Class B (medium-2) assessment rating for eight (8) out of twelve (12) elements for (66.6%),** and a Class C (high-3) assessment rating for one(1) out of twelve (12) elements for (8.3%).

The overall **Community Assessment rating** for the Shoshone FPD is **"medium or 2"** which reflects upon strong community support for increased firewise education and emphasizes emergency response infrastructure needs throughout the FPD.

Table 23. Community Assessment Summary for Shoshone FPD

Rating Element	Class A	Class B	Class C	Rating (A,B, or C)
Community Description	There is a clear line where residential business, and public structures meet wildland fuels. Wildland fuels do not generally continue into the developed area.	There is no clear line of demarcation; wildland fuels are continuous outside of and within the developed area.	The community generally exists where homes, ranches, and other structures are scattered but adjacent to wildland vegetation.	B
Response Time	Prompt response time to interface areas (? Minutes or less)	Moderate response time to interface area (? Minutes)	Lengthy response time to interface area (? Minutes)	B
Firefighting Capability	Adequate structural fire department. Sufficient personnel, equipment, and wildland firefighting capability and experience.	Inadequate fire department. Limited personnel, and or equipment but with some wildland firefighting experience and training.	Fire department non-existent or untrained and/or equipped to fight wildland fire	B
Water Supply	Adequate supply of fire hydrants and pressure, and/or open water sources (pools, lakes, reservoirs, rivers, etc.).	Inadequate supply of fire hydrants, or limited pressure. Limited water supply.	No pressure water system available near interface. No surface water available.	B
Local Emergency Operations Group (EOG)	Active EOG. Evacuation plan in place.	Limited participation in EOG. Have some form of evacuation process.	No EOG. No evacuation plan in place.	B
Structure Density	At least one structure per 0-5 acres.	One structure per 5-10 acres.	Less than one structure per 10 acres.	A
Community Planning Practices	County/local laws and zoning ordinances require use of fire safe residential design and adequate ingress/egress of fire suppression resources. Fire department actively participates in planning process.	Local officials have an understanding of appropriate community planning practices for wildfire loss mitigation. Fire department has limited input to fire safe development and planning efforts.	Community standards for fire safe development and protection are marginal or non-existent. Little or no effort has been made in assessing and applying measures to reduce wildfire impact.	B

Rating Element	Class A	Class B	Class C	Rating (A,B, or C)
Fire Mitigation Ordinances, Laws, or Regulations in Place	Have adopted local ordinances or codes requiring fire safe landscaping, building and planning. Fire department actively participates in planning process.	Have voluntary ordinances or codes requiring fire safe landscaping and building practices. Fire department participates in planning process.	No local codes, laws or ordinances requiring fire safe building landscaping or planning processes.	A
Fire Department Equipment	Good supply of structure and wildland fire apparatus and miscellaneous specialty equipment.	Smaller supply of fire apparatus in fairly good repair with some specialty equipment.	Minimum amount of fire apparatus, which is old and in need of repair. None or little specialty equipment.	B
Fire Department Training and Experience	Large, fully paid fire department with personnel that meet NFPA or NWCG training requirements, are experienced in wildland fire, and have adequate equipment.	Mixed fire department. Some paid and some volunteer personnel. Limited experience, training and equipment to fight wildland fire.	Small, all volunteer fire department. Limited training, experience and budget with regular turnover of personnel. Do not meet NFPA or NWCG standards.	C
Community Fire Safe Efforts and programs already in place	Organized and active groups (Fire Dept.) providing educational materials and programs for their community.	Limited interest and participation in educational programs. Fire department does some prevention and public education.	No interest of participation in educational programs. No prevention/education efforts by fire department.	B
Community support and attitudes	Actively supports urban interface plans and actions.	Some participation in urban interface plans and actions.	Opposes urban interface plans and efforts.	A
Overall Assessment Rating				**21**

Class A (1) = low fire risk **16 or less = low fire risk**
Class B (2) = medium fire risk **17-21 = moderate fire risk**
Class C (3) = high fire risk **22-27 = high fire risk**

6.3b Shoshone Fire Department Infrastructure

6.3c Equipment

Station One and Station Two:

The department has a good variety of mechanized equipment to support structural and wildland fire incidents. However, the structural engines are outdated and in need of upgrading with new, state of the art technical equipment for less maintenance and more dependability.

Upon equipment upgrade the ten (10) year equipment rotation technique should be implemented to replace outdated emergency equipment.

The department has the basic Personal Protective equipment (PPE) for necessary firefighter safety, however there is nothing available for new volunteers, personal protective items (nomex turnouts, and SCBA's) are expensive to maintain and difficult to replace when necessary.

Extraction tools are very expensive, but very important tools, when the needs arises. Extraction tools are considered "non-essential" equipment items, therefore normal funding is not available for purchase, maintenance or replacement. Every Lincoln County Emergency Service vehicle should have the basic set of extraction tools.

6.3d Personnel/Training

Presently Shoshone FPD has a total of twenty- six (26) volunteer firefighters, of which, twenty (20) are active responders. The department needs more personnel to obtain the most efficient staffing levels on firefighting equipment and support personnel for replacement firefighters to have available if an incident involves extended attack.

The Department needs basic and advanced fire training annually to bring volunteers up to National Wildfire Coordination Group (NWCG) and National Wildfire Firefighting Safety (NWFS) standards. Also additional wildland and structural training is necessary to maintain efficiency, maintain new volunteer upward mobility training ladders, and have an effective training cadre. The recommended, standard ten (10) year training program, for each FPD is included in (Appendix B).

6.3e Facilities

Shoshone Station One (Figure 13) was constructed in 1949. The station affords the opportunity to house emergency equipment inside, out of inclement weather and ready for a response year around; however, the station is in need of a major upgrades including a changing room, additional storage space, ceiling insulation and new electrical wiring.

The necessary repair and upgrade of Station One is Shoshone City and Rural Fire Department's highest structural priority. For department efficiency and compliance with the National Fire Code, the appropriate funding support needs to be pursued.

Shoshone Station Two (Figure 14) is located four (4) miles north and twelve (12) west of the city of Shoshone. Constructed in 1946, station two (2) is nothing more than a long "single car garage". The station is not heated, has no restroom; no changing room; no office or training space, no storage space, and a gravel floor. Station two has adequate space for three (3) types of emergency equipment, as noted above; however, the limited space requires each piece of equipment to be backed in and stored "end to end". What piece of equipment is stored in first out position depends up the season and time of year.

Support the fund raising efforts presently underway to provide funding for a new facility for Station Two. Upgrade, and improve upon Shoshone's existing stations (1&2) is Shoshone City and Rural Fire Department's top equipment infrastructure priorities.

6.3f Prevention/Education

The results of the structural assessment revealed the need for a promotional program to further the understanding of firewise practices around homes and agricultural structures. Public education and outreach are effective means of engaging the community in the process of reducing risks. And, an education and outreach program will motivate homeowners to take measures around their individual homes and property, thereby contributing to the reduction of wildfire hazards in each community.

Figure 13: Shoshone Fire Station #1

Figure 14: Shoshone Fire Station #2

Figure 15: Sunset Subdivision Typical Fuel Loading Shoshone FPD

Figure 16: Sunset RV Park Typical Fuel Loading Shoshone FPD